

CLAIMS

What is claimed is:

1. A method to operate a dual mode multi-timeslot RF transmitter, comprising:

prior to a first timeslot, setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot; and

during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format.

2. A method as in claim 1, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of a power amplifier.

3. A method as in claim 1, where one of the plurality of control signals sets a power amplifier quiescent current.

4. A method as in claim 1, where at least one of the plurality of control signals controls power amplifier gain.

5. A method as in claim 1, where one of the plurality of control signals sets a power amplifier mode of operation.

6. A method as in claim 5, where the mode of operation is one of a variable gain power amplifier and a fixed gain power amplifier.

7. A method as in claim 1, where one of the modulation formats operates with a variable gain power amplifier and the other of the modulation formats operates with a fixed gain power amplifier, where one of the plurality of control signals sets the power amplifier

gain and is ramped during the guard period.

8. A method as in claim 1, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

9. A dual mode multi-timeslot RF transmitter, comprising:

a programmable power amplifier; and

a multi-timeslot control unit outputting control signals to said programmable power amplifier, said control unit operating, prior to a first timeslot, for setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during the first timeslot and, during a guard period between the first timeslot and a next, temporally adjacent timeslot, for setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where the first modulation format differs from the second modulation format.

10. A dual mode multi-timeslot RF transmitter as in claim 9, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of said power amplifier.

11. A dual mode multi-timeslot RF transmitter as in claim 9, where one of the plurality of control signals sets a power amplifier quiescent current.

12. A dual mode multi-timeslot RF transmitter as in claim 9, where at least one of the plurality of control signals controls the gain of the power amplifier.

13. A dual mode multi-timeslot RF transmitter as in claim 9, where one of the plurality of control signals sets a power amplifier mode of operation.

14. A dual mode multi-timeslot RF transmitter as in claim 13, where the mode of operation is one of variable gain and fixed gain.

15. A dual mode multi-timeslot RF transmitter as in claim 9, where one of the modulation formats operates with the power amplifier in a variable gain mode and the other of the modulation formats operates with the power amplifier in a fixed gain mode, where one of the plurality of control signals sets the power amplifier gain mode and is ramped by said control unit during the guard period.

16. A dual mode multi-timeslot RF transmitter as in claim 9, where one of the modulation formats is 8-PSK, and where the other of the modulation formats is GMSK.

17. A method to operate a dual mode EDGE RF transmitter, comprising:

prior to a first timeslot, setting a plurality of control signals for the RF transmitter in accordance with a first modulation format used during a first timeslot; and

during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where one of the modulation formats is 8-PSK using a power amplifier in a fixed gain mode and where the other of the modulation formats is GMSK using the power amplifier in a variable gain mode, where one of the plurality of control signals sets the power amplifier gain and is ramped during the guard period, and where another one of the plurality of control signals sets the power amplifier quiescent current.

18. A method as in claim 17, where one of the plurality of control signals is coupled to an RF attenuator having an output that is coupled to an input of the power amplifier.

19. A method as in claim 17, where the control signal that sets the power amplifier gain is ramped between a base level and a controlling level during the guard period.